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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,421	07/25/2000	George D. Dumbaugh	1112-1017.1	6645

7590

10/01/2002

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EXAMINER

KING, BRADLEY T

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 10/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/625,421

Applicant(s)

DUMBAUGH, GEORGE D.

Examiner

Bradley T King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 12 and 15 have all been amended to include the limitation "self-phasing". This term has not been presented or defined in the original disclosure and constitutes new matter.

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms "relatively rigid" and "relatively weak" in claims 1, 12 and 15 are relative terms which render the claims indefinite. The specification does not provide a standard for

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ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-18 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumbaugh et al (4149627) in view of Rosenstrom.

Dumbaugh et al discloses an apparatus including: a vibratory apparatus with a bed 111, a plurality of inclined stabilizers 115, each stabilizer having a first end, a second end and a longitudinal axis, the first end of each stabilizer being attached to the bed. Dumbaugh et al lack the disclosure of two separate pairs of freewheeling eccentric weights. Rosenstrom teaches a control system and plurality of motor and weight pairs in a vibratory apparatus. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the motors and control system of Rosenstrom in the bed structure of Dumbaugh et al to provide operation and control through multiple vibratory modules, thereby reducing the cost and increasing the durability of the system.

Regarding claim 2, Dumbaugh disclose a plurality of drive springs 114.

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Regarding claim 6, Dumbaugh et al disclose a counterbalance 116.

Regarding claim 7, Dumbaugh et al disclose isolation springs 117.

Regarding claims 8 and 16, the modification of the spring rates and the motor/weight characteristics is well known in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify either through routine experimentation and optimization to achieve the desired movement.

Regarding claims 17-18, Rosenstrom teach controller 60 for changing the speed of the motors.

5. Claims 1-18 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumbaugh (4149627) in view of Venanzetti.

Dumbaugh et al discloses an apparatus including: a vibratory apparatus with a bed 111, a plurality of inclined stabilizers 115, each stabilizer having a first end, a second end and a longitudinal axis, the first end of each stabilizer being attached to the bed. Dumbaugh et al lack the disclosure of two separate pairs of freewheeling eccentric weights. Venanzetti teaches a plurality of motor and weight pairs in a vibratory apparatus. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize a plurality of motor and weight pairs as taught by Venanzetti in the bed structure of Dumbaugh et al to reduce the stress in the structure, thereby increasing the durability of the device.

Regarding claim 2, Dumbaugh disclose a plurality of drive springs 114.

Regarding claim 6, Dumbaugh et al disclose a counterbalance 116.

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Regarding claim 7, Dumbaugh et al disclose isolation springs 117.

Regarding claims 8 and 16, the modification of the spring rates and the motor/weight characteristics is well known in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify either through routine experimentation and optimization to achieve the desired movement.

Regarding claims 17-18, Dumbaugh et al teach changing the speed of the motors (column 3, lines 1-17).

Response to Arguments

6. Applicant's arguments filed 7/2/02 have been fully considered but they are not persuasive.

With regards to Dumbaugh and Rosenstrom, it is maintained that the rejection is proper. Dumbaugh discloses leaf springs 115 which , in the orientation shown, are clearly rigid in the transverse direction and weak in the direction of stroke. With regards to Rosenstrom, the reference teaches the use of multiple pairs of eccentric weights. While Rosenstrom may utilize electronic control to maintain a desired phase angle, this additional level of to be another level of control. It is unclear how the structure of the applicant's invention is different from that of the combination. From applicant's disclosure it appears that the phasing occurs due to features of the conveyor (rigidity in the transverse direction). Since the structure is known (disclosed by Dumbaugh), it is unclear how multiple weight pairs would behave differently when applied to the

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structure of Dumbaugh. Rosenstrom or Venanzetti both demonstrate that the use of multiple weight pairs is known.

In response to applicant's arguments against the Venanzetti reference individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's arguments, the recitation "adapted to vibrate along a line of stroke" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Conclusion

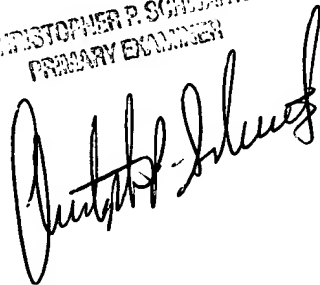
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

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MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley King whose telephone number is (703)308-8346.

CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER


BTK

September 23, 2002